

REMARKS

Applicants respectfully request further examination and reconsideration in view of the instant response. Claims 1, 19, and 28 are amended herein. No new matter has been added.

CLAIM REJECTIONS35 U.S.C. §1 03

Claims 1, 5, 7, 1 8-19, 28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Chacon et al (US Patent No. 5,831,819), hereinafter, Chacon. The rejection is respectfully traversed.

Claim 1 recites:

A miniature keyboard comprising:
a plurality of equally spaced keys on a single keypad for inputting data to a portable electronic device;
wherein said keys of said plurality of equally spaced keys are individually sized such that multiple ones can be depressed by a single finger tip depression and wherein adjacent keys differ in height; and
wherein said keys comprise at least one set of keys that are raised for providing key differentiation and to facilitate single key selection.

Claim 1 recites a miniature keyboard having “a plurality of equally spaced keys on a single keypad for inputting data to a portable electronic device.” It is respectfully submitted that Chacon fails to teach or suggest “equally spaced” or “on a single keypad,” as claimed. Chacon may teach keys that differ in height on multiple keypads of an electronic device, but Chacon does not, in any

embodiment, teach a single keypad with equally spaced keys wherein the keys comprise at least one set of keys that are raised for providing key differentiation and to facilitate single key selection, as claimed. In addition, Chacon fails to teach or suggest "wherein adjacent keys differ in height," as claimed. For the foregoing rational, Claim 1 is not obvious over Chacon. As such, allowance of Claim 1 is respectfully solicited.

Claims 5, 7, and 18 depend from Independent Claim 1. Applicants respectfully assert that Claims 5, 7, and 18 traverse the rejections of record as they depend from an allowable base Claim and respectfully solicit allowance of these Claims.

For the above rational, Claims 19 and 28 are not rendered obvious over Chacon. As such, allowance of Claims 19 and 28 is respectfully solicited.

Claims 2, 8, 10, 12-14, 16, 20, 23, 25-26, 29, 31

Claims 2, 8, 10, 12-14, 16, 20, 23, 25-26, 29, 31 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Chacon et al. As formentioned in Claims 1, 19, 28 in view of Preker (US Patent No. 5,598,469), hereafter, Preker. The rejection is respectfully traversed.

For the reasons discussed in response to Claim 1, Chacon does not teach or suggest keys on a "single keypad," or keys that are "equally spaced," or wherein "adjacent keys differ in height," as claimed.

Chacon taken in combination with Preker fails to suggest these Claim limitations because Preker does not remedy the deficiencies in Chacon. Preker may disclose a single keyboard having all buttons of one row at a greater height than all of the buttons of another row. However, Preker fails to teach or suggest keys that are "equally spaced" or wherein "adjacent keys differ in height," as claimed. In fact, Preker teaches "adjacent key(s) have approximately the same elevation," (column 2 lines 37-38) which actually teaches away from the claimed limitations of the present invention. For the foregoing rational, Claim 1 is not rendered obvious over Chacon in view of Preker. As such, allowance of Claims 2, 8, 10, 12-14, 16, 20, 23, 25-26, 29, 31 is earnestly solicited.

Claims 3-4, 21-22, 27, 30

Claims 3-4, 21-22, 27, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chacon in view of Preker aforementioned in Claims 2, 8, 20, 26, 29 in view of Kiernan (PUB. No. US 2002/0110238v AI). The rejection is respectfully traversed.

The deficiencies of Chacon and Preker are not remedied by Kiernan. Kiernan may disclose a keypad that tapers to a lower height towards the outer edge of the keypad. However, Kiernan discloses section [0005] lines 9-10, "a set of at least nine independently manually actuable keys. Kiernan fails to teach or suggest "multiple ones can be depressed by a single finger tip depression," as claimed. In fact, Kiernan actually teaches away from the limitation, as claimed.

It would be possible to depress multiple keys at one time on the Kiernan keyboard, however, the size of the keys on the Kiernan keyboard are not sized such that they are smaller than a single fingertip depression, as claimed. In addition, Kiernan does not teach or suggest "wherein adjacent keys differ in height," as claimed. For the foregoing rational, Claim 1 is not rendered obvious over Chacon in view of Preker and in view of Kiernan. As such, allowance of Claims 3-4, 21-22, 27, and 30 is respectfully solicited.

Claims 6, 11, 15, 24

Claims 6, 11, 15, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chacon et al. in view of Preker as forementioned in claims 2, 8, 13, 20 in view of Miller (US Patent No. 5,660,448), hereinafter Miller. The rejection is respectfully traversed.

The deficiencies of Chacon and Preker are not remedied by Miller. Miller may disclose a standard QWERTY keyboard. However, Miller disclosed Col. 6, lines 43-46 "the distance between the center points of adjacent keys in the same row of the QWERTY keyboard layout 410 of keyboard 440 is maintained approximately the same as in standard keyboard 140." In addition, Miller teaches keys that are not "equally spaced," as claimed (Figures 2, 3, 4, 5A, 5B, 5C, 6, 7A, 7B, 7C, 8, 9, 10, 11, 12, 13, 14, 15A, 15B, 15C, 15D). For the foregoing rational, Claim 1 is not rendered obvious over Chacon in view of Preker and Miller. As such, allowance of Claims 6, 11, 15, and 24 is earnestly solicited.

Claim 17

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chacon et al. As aforementioned in Claim 1 in view of Louis (US Patent No. 5,212,473), hereafter Louis. The rejection is respectfully traversed.

Louis does not remedy the deficiencies in Chacon. Louis teaches "the keyboard housing includes a left hand portion and a right hand portion," (col. 4 lines 1-2) which actually teaches away from the claimed limitations of the present invention because it is not "a single keypad" nor are the keys "equally spaced," as claimed. For the foregoing rational, Claim 17 is not rendered obvious over Chacon in view of Louis. As such, allowance of Claim 17 is earnestly solicited.

CONCLUSION


In light of the above listed remarks, reconsideration of the rejected Claims is requested. Based on the arguments presented above, it is respectfully submitted that Claims 1-31 overcome the rejections and objections of record and, therefore, allowance of Claims 1-31 is earnestly solicited.

Should the Examiner have a question regarding the instant response, the Applicants invite the Examiner to contact the Applicants' undersigned representative at the below listed telephone number.

Respectfully submitted,

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